IN THE CLAIMS:

1. (currently amended) A method for manufacturing hollow shafts (11') having end portions (12', 16) of greater wall thickness and at least one intermediate portion (14') of reduced wall thickness, from a tube (11) having constant wall thickness using a mandrel (21) having diameters stepped over its length, which has a first longitudinal section (22) having a smallest diameter and at least one further longitudinal section (24) having a further larger diameter, having the following steps:

reducing the external diameter of a first portion (12) of the tube (11) over the first longitudinal section (22) of the mandrel (21) to produce the first end portion (12),

reducing the external diameter of at least one middle portion (14) of the tube (11) over the at least one further longitudinal section (24) of the mandrel (21) to produce the at least one second intermediate portion (14),

reducing the external diameter of a further portion (16) of the tube (11) over another longitudinal section (22) of the mandrel (21) to produce the second end portion (16).

2.-9. (cancelled)